Systemic Therapy Update



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For Health Professionals Who Care For Cancer Patients

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EDITOR'S CHOICE

New Programs

The Provincial Systemic Therapy Program has approved the following programs effective 1 November 2014:

nab-Paclitaxel (ABRAXANE®) and Gemcitabine for Locally Advanced and Metastatic Pancreatic Cancer (UGIPGEMABR) – Effective therapeutic options for advanced pancreatic adenocarcinoma have been limited. The standard of care includes either single agent gemcitabine or the triple regimen FOLFIRINOX (fluorouracil, irinotecan, oxaliplatin). Single agent gemcitabine has modest clinical benefit while FOLFIRINOX is an option only for a minority of patients due to its toxicity.

The addition of nab-paclitaxel to gemcitabine is a new therapeutic option which has recently been shown to improve the overall survival compared to gemcitabine alone (8.5 vs. 6.7 months, HR 0.69) [Von Hoff DD et al. N Engl J Med 2013;369:1691] The combination regimen was also associated with increased progression free survival (5.5 vs. 3.7 months, HR 0.69) and response rate (23% vs. 7%). It is relatively well tolerated and potentially less toxic than FOLFIRINOX. Common side effects include myelosuppression, fatigue, diarrhea, and neuropathy. A BCCA Compassionate Access Program application is required for each patient.

EDITOR'S CHOICE

Neoadjuvant Paclitaxel followed by Doxorubicin and Cyclophosphamide (AC) for Locally Advanced Breast Cancer (BRLATWAC, BRLATACG) – Patients with HER2 negative, locally advanced breast cancer are usually treated with neoadjuvant AC followed by either weekly paclitaxel (BRLAACTW) or dose dense AC followed by docetaxel (BRLAACD). A recent phase III trial has shown that reversing the sequence of the chemotherapy agents, i.e., paclitaxel followed by anthracycline and cyclophosphamide, was associated with improved pathological complete response (20% vs. 15%) [Earl HM, et al. Lancet Oncol 2014;15:201].

Therefore, the new BRLATWAC protocol (weekly paclitaxel followed by AC) will replace the current BRLAACTW (AC followed by weekly paclitaxel). Another new protocol, BRLATACG (dose dense paclitaxel followed by AC), will offer an option to the current BRLAACD (dose dense AC followed by docetaxel).

Chlorambucil and Rituximab for Indolent Lymphoma and Chronic Lymphocytic Leukemia (LYCHLRR) — Single agent chlorambucil is a standard treatment for patients with lymphoma and chronic lymphocytic leukemia (CLL), particularly for those who are elderly or with comorbidities that make them ineligible for more intensive therapies. The addition of rituximab has been shown to improve event free survival (EFS) in patients with low grade B-cell lymphomas (68% vs 50%) [Zucca et al. J Clin Oncol 2013;31;565], and in patients with CLL, to improve progression free survival (16.3 vs 11.1 mos, HR 0.44) and overall response rate (58% vs. 31%) in patients with CLL [Goede V, et al. N Engl J Med 2014;370:1101].

Etoposide, Doxorubicin, Cisplatin and Mitotane for Metastatic Adrenocortical Cancer (GUEDPM) — Adrenocortical carcinoma is a rare but often aggressive cancer. Patients with metastatic disease have a 5-year survival rate of less than 15%. Mitotane is the traditional agent used although it has not been studied in randomized controlled trials. The addition of cytotoxic agents etoposide, doxorubicin and cisplatin (EDP) to mitotane has been shown to improve the progression free survival (5.0 vs. 2.1 months, HR 0.55) and response rate (23.2% vs. 9.2%) compared to streptozocin plus mitotane [Fassnacht M et al. N Engl J Med 2012;366:2189]. The EDP-mitotane regimen was associated with similar rates of serious adverse events to the streptozocin-mitotane combination.

CANCER DRUG MANUAL

REVISED MONOGRAPHS, PATIENT HANDOUTS AND HAZARDOUS DRUG LIST

Filgrastim Handout has been revised to correspond with recent updates to the filgrastim monograph (see September issue of Systemic Therapy Update).

Extravasation Hazard information has been updated for several monographs

- Oxaliplatin, Paclitaxel, nab-Paclitaxel: these irritants should be treated as vesicants if extravasated. This update is to be consistent with the current BCCA Policy on Prevention and Management of Extravasation of Chemotherapy (Policy III-20).
- **Gemcitabine:** the extravasation hazard has been upgraded from "none" to "irritant". This change is based on observation that although extravasation of gemcitabine does not cause tissue necrosis, gemcitabine can cause chemical phlebitis. More recent practice guidelines have reclassified gemcitabine to be an irritant. 1,2

References

- 1. Pérez Fidalgo JA, et al. Management of chemotherapy extravasation: ESMO–EONS Clinical Practice Guidelines. Ann Oncol 2012;23(suppl 7):vii167-vii173.
- 2. Oncology Nursing Society. Infusion-related complications. Chemotherapy and biotherapy guidelines. Pittsburgh, PA: Oncology Nursing Press,

CANCER DRUG MANUAL

Inc; 2014.

Dexamethasone Handout for Brain Tumour Patients has been developed by the BCCA Neuro-Oncology Tumour Group. This handout provides more details than the general dexamethasone handout and should be used for patients treated with dexamethasone for brain tumours.

MEDICATION SAFETY

IMPROVING WEBSITE CLARITY FOR PROTOCOL CODE SELECTION

As the number of chemotherapy protocols continues to grow, there is an emerging risk of selection error due to look-alike protocol codes. For example, the Institute for Safe Medication Practices (ISMP) of Canada reported a case where the protocol FOLFOX was used instead of FOLFIRI.¹

The BCCA Systemic Therapy Medication Safety Subcommittee has reviewed the different points in the medication management system where the selection of protocol code occurs. The review has identified the BCCA website display as an area where improvement in clarity would yield the most benefit. After several rounds of evaluation by human factors specialists and end-users (physicians, nurses, pharmacists, pharmacy assistants, unit clerks), the following changes will be piloted in the Breast Tumour Group protocols starting 1 November 2014:

- Protocol code and title will remain in black colour as a default
- Red colour will be used to highlight differing letter(s) amongst look-alike protocol codes, e.g.,

BRAJAC: Adjuvant therapy for breast cancer using DOXOrubicin and Cyclophosphamide

BRAJACT: Adjuvant Therapy for Breast Cancer using DOXOrubicin and Cyclophosphamide followed by PACLitaxel

BRAJACTG: Adjuvant Therapy for Breast Cancer using Dose Dense Therapy: DOXOrubicin and Cyclophosphamide followed by PACLitaxel

BRAJACTT: Adjuvant Therapy for Breast Cancer using DOXOrubicin and Cyclophosphamide followed by PACLitaxel and Trastuzumab

BRAJACTTG: Adjuvant Therapy for Breast Cancer using Dose Dense Therapy: DOXOrubicin and Cyclophosphamide followed by PACLitaxel and Trastuzumab

BRAJACTW: Adjuvant Therapy for Early Breast Cancer using DOXOrubicin and Cyclophosphamide followed by Weekly PACLitaxel

To comment or provide feedback on this pilot, please contact Tonya Ng, Medication Safety Coordinator (tonya.ng@bccancer.bc.ca).

Reference

1. Medication incidents involving cancer chemotherapy agents. ISMP Can Saf Bull [Internet]. 2010 Mar 16 [cited 2014 Jul 14];10(1):1-4. Available from: http://www.ismp-canada.org/download/safetyBulletins/ISMPCSB2010-01-CancerChemotherapyAgents.pdf

BENEFIT DRUG LIST

New Programs

BENEFIT DRUG LIST

The following programs have been added to the **Benefit Drug List** effective 1 November 2014:

Protocol Title	Protocol Code	Benefit Status
Neoadjuvant therapy for breast cancer using dose dense therapy: paclitaxel followed by doxorubicin and cyclophosphamide	BRLATACG	Class I
Neoadjuvant therapy for locally advanced breast cancer using weekly paclitaxel followed by doxorubicin and cyclophosphamide	BRLATWAC	Class I
First line treatment of locally advanced and metastatic pancreatic cancer with <i>paclitaxel-nab</i> (ABRAXANE®) and <i>gemcitabine</i>	UGIPGEMABR	Restricted
Treatment of metastatic adrenocortical cancer with <i>doxorubicin</i> , <i>etoposide</i> , <i>cisplatin</i> and <i>mitotane</i>	GUEDPM	Class I
Treatment of indolent B-cell lymphoma and chronic lymphocytic leukemia with <i>chlorambucil</i> and <i>rituximab</i>	LYCHLRR	Class II

The following program have been revised on the Benefit Drug List effective 1 November 2014:

Protocol Title	Protocol Code	Benefit Status
Maintenance <i>rituximab</i> for indolent lymphoma	ULYRMTN	Class II
iviaintenance <i>rituximub</i> for indolent lymphoma	OLIKIVITIN	(Previously Restricted)

The following program have been removed on the **Benefit Drug List** effective 1 November 2014:

Protocol Title	Protocol Code	Benefit Status
Treatment of locally advanced breast cancer using <i>doxorubicin</i> and <i>cyclophosphamide</i> followed by weekly <i>paclitaxel</i>	BRLAACTW	Deleted (Replaced by BRLATWAC)

CONTINUING PROFESSIONAL DEVELOPMENT

INTERPROFESSIONAL WORKSHOPS

Education in Palliative and End of Life Care for Oncology (EPEC™-O)

Date: 24 November 2014 (all day) 1 December 2014 (all day)

Location: CSI/Kelowna VC/Vancouver

Registration: PHSA Learning Hub (EPEC-O, Kelowna or Vancouver), space is limited

EPEC™-O Canada is an education program for the interprofessional oncology team. It is a comprehensive curriculum in palliative and end-of-life care developed specifically for clinicians caring for people with cancer. The Canadian Partnership Against Cancer has partnered with the BC Cancer Agency in providing faculty expertise and support to offer these two workshops. During the day long session, participants will engage in an interactive program which includes lectures, exercises, group discussions, and application of theory to cases. Topics to be covered include:

Models of care

CONTINUING PROFESSIONAL DEVELOPMENT

- Communicating effectively
- Symptom management (nausea, vomiting, dyspnea)
- Negotiating goals of care
- Advance care planning

Credit for CME is being arranged.

For more information, please contact Joanne.Tait@bccancer.bc.ca

PROVINCIAL SYSTEMIC THERAPY PROGRAM

REFORMAT OF BCCA POLICY ON PREVENTION AND MANAGEMENT OF EXTRAVASATION OF CHEMOTHERAPY

The BCCA Systemic Therapy Policy (<u>III-20</u>) on chemotherapy extravasation has been reformatted. The table of drugs classified according their extravasation hazard has been moved to the appendix of the Cancer Drug Manual (<u>www.bccancer.bc.ca/HPI/DrugDatabase/Appendices/Appendices</u>).

DRUG UPDATE

ENZALUTAMIDE PATIENT ASSISTANCE PROGRAM

The manufacturer of enzalutamide (XTANDI®) provides a financial assistance program for patients with or without third party health insurance to access enzalutamide for the treatment of prostate cancer.

LIST OF NEW AND REVISED PROTOCOLS, PRE-PRINTED ORDERS AND PATIENT HANDOUTS

BC Cancer Agency Protocol Summaries, Provincial Pre-Printed Orders (PPPOs) and Patient Handouts are revised periodically. New, revised or deleted protocols, PPPOs and patient handouts for this month are listed below. Protocol codes for treatments requiring "Compassionate Access Program" (previously Undesignated Indications Request) approval are prefixed with the letter "U".

NEW Protocols, PPPOs and Patient Handouts (Affected Documents are Checked):					
CODE	Protocol	PPPO	Patient Handout	Protocol Title	
BRLATACG	$\overline{\checkmark}$	V	Neoadjuvant Therapy for Breast Cancer Using Dose Dense Therapy PACLitaxel Followed by DOXOrubicin and Cyclophosphamide		
BRLATWAC	$\overline{\checkmark}$	V	Neoadjuvant Therapy for Locally Advanced Breast Cancer Using PACLitaxel Followed by DOXOubicin and Cyclophosphamide		
UGIPGEMABR	$\overline{\checkmark}$	V	First Line Treatment of Locally Advanced and Metastatic Pane Cancer with PACLitaxel-Nab (ABRAXANE®) and Gemcitabine		
GUEDPM	$\overline{\checkmark}$	$\overline{\checkmark}$	Treatment of Metastatic Adrenocortical Cancer with DOXOrubicin, Etoposide, CISplatin and Mitotane		

NEW Protocols, PPPOs and Patient Handouts (Affected Documents are Checked):					
CODE Protocol PPPO Patient Handout Protocol Title					
LYCHLRR	\square	V		Treatment of Indolent B-Cell Lymphoma and Chronic Lymphocytic Leukemia with Chlorambucil and RiTUXimab	

REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):						
CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title	
BRAVEVEX	\square	V		Lab tests clarified	Therapy for Advanced Breast Cancer Using Everolimus and Exemestane	
UCNBEV	\square	Ø		Lomustine dose reduced	Palliative Therapy for Recurrent Malignant Gliomas Using Bevacizumab With or Without Concurrent Etoposide or Lomustine	
GICIRB				Duration of extension of therapy updated	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Bevacizumab and Capecitabine	
GIFFIRB	Ø			Duration of extension of therapy updated, instructions for non-dose banding centres added	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Irinotecan, Fluorouracil, Leucovorin and Bevacizumab	
UGIFFOXB				Duration of extension of therapy updated	Palliative Combination Chemotherapy for Metastatic Colorectal Cancer Using Oxaliplatin, Fluorouracil, Leucovorin and Bevacizumab	
UGIFIRINOX				Oxaliplatin diluent volume clarified	Palliative Combination Chemotherapy for Advanced Pancreatic Adenocarcinoma Using Irinotecan, Oxaliplatin, Fluorouracil and Leucovorin	
GOCXCRT		$\overline{\checkmark}$		Return appointment orders clarified	Treatment of High Risk Squamous Carcinoma, Adenocarcinoma, or Adenosquamous Carcinoma of the Cervix with Concurrent CISplatin and Radiation	
GOENDH				TALLman lettering and small case drug name formatted	Non-Aromatase Inhibitor Hormonal Treatment of Endometrial Cancer	
GUPLHRH	\square	\checkmark		Leuprolide brand names added	Therapy for Prostate Cancer Using LHRH Agonist (Goserelin, Leuprolide or Buserelin)	
GUSCPE	\square			Number of treatment cycles clarified	Palliative Therapy of Extensive Stage Genitourinary Small Cell Tumours with a Platinum and Etoposide	
HNAVP	$\overline{\square}$			Dose modifications clarified	Palliative Chemotherapy for Advanced Head and Neck Squamous Cell Carcinoma with Weekly CISplatin	
LYIVACR		$\overline{\checkmark}$		TALLman lettering formatted	Treatment of Burkitt's Lymphoma and Leukemia with Ifosfamide, Mesna, Etoposide, Cytarabine and riTUXimab	
HNLAPRT		Ø		TALLman lettering and small case drug name formatted	Combined Chemotherapy and Radiation Treatment for Locally Advanced Squamous Cell Carcinoma of the Head and Neck	

REVISED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):						
CODE	Protocol	PPPO	Patient Handout	Changes	Protocol Title	
ULKATOATRA	V			Antifungal deleted, treatment start date and QT correction revised	First-Line Induction and Consolidation Therapy of Acute Promyelocytic Leukemia Using Arsenic Trioxide and Tretinoin (All- Trans Retinoic Acid)	
ULKATOP	I			Antifungal deleted, treatment start date and QT correction revised	First-Line Induction and Consolidation Therapy of Acute Promyelocytic Leukemia Using Arsenic Trioxide, Tretinoin (All-Trans Retinoic Acid) and DAUNOrubicin	
ULKATOR	\square			Antifungal deleted, QT correction revised	Induction and Consolidation Therapy of Relapsed Acute Promyelocytic Leukemia Using Arsenic Trioxide	
ULUAVAFAT				Minor typo corrected	First-Line Treatment of Epidermal Growth Factor Receptor Mutation- Positive Advanced Non-Small Cell Lung Cancer with Afatinib	
LYABVD				Etoposide infusion time updated	Treatment of Hodgkin's disease with DOXOrubicin, Bleomycin, vinBLAStine and Dacarbazine	
LYCHOP		$\overline{\checkmark}$		Etoposide infusion time updated	Treatment of Lymphoma with DOXOrubicin, Cyclophosphamide, vinCRIStine and predniSONE	
LYCHOPR		$\overline{\checkmark}$		Etoposide infusion time updated	Treatment of Lymphoma with DOXOrubicin, Cyclophosphamide, vinCRIStine, predniSONEand riTUXimab	
LYCHOPRMTX				Etoposide infusion time updated	Central Nervous System Prophylaxis with High Dose Methotrexate, CHOP and RiTUXimab in Diffuse Large B-cell Lymphoma	
LYRMTN	\square	$\overline{\checkmark}$		Benefit status revised	Maintenance riTUXimab for Indolent Lymphoma	

DELETED PROTOCOLS, PPPOS AND PATIENT HANDOUTS (AFFECTED DOCUMENTS ARE CHECKED):						
CODE Protocol PPPO Patient Handout Changes Protocol Title					Protocol Title	
BRLAACTW				Replaced by BRLATWAC	Treatment of Locally Advanced Breast Cancer using DOXOrubicin and Cyclophosphamide followed by Weekly PACLitaxel	

Website Resources and Contact Information				
WEBSITE RESOURCES	www.bccancer.bc.ca			
Systemic Therapy Update	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/stupdate			
Reimbursement & Forms: Benefit Drug List, Class II, Compassionate Access Program	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms			
Cancer Drug Manual	www.bccancer.bc.ca/cdm			
Cancer Management Guidelines	www.bccancer.bc.ca/CaMgmtGuidelines			
Cancer Chemotherapy Protocols, Pre-printed Orders, Protocol Patient Handouts	www.bccancer.bc.ca/ChemoProtocols			
Systemic Therapy Program Policies	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies			
CON Pharmacy Educators	www.bccancer.bc.ca/HPI/Pharmacy/ContactUs.htm			

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Compassionate Access Program (CAP)	604.877.6277	604.708.2026	cap_bcca@bccancer.bc.ca
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BCCA-Sindi Ahluwalia Hawkins Centre for the	250.712.3900		
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